

1                                   BEFORE THE STATE OF WASHINGTON  
2                                   ENERGY FACILITY SITE EVALUATION COUNCIL  
3

4 In the Matter of Application No. 2004-01:  
5 WIND RIDGE POWER PARTNERS, LLC;  
6 WILD HORSE WIND POWER PROJECT  
7  
8  
9

EXHIBIT 28 R (WE-R)

10                                   **APPLICANT'S PREFILED REBUTTAL TESTIMONY**  
11                                   **WITNESS # 9: WALLY ERICKSON**  
12  
13

14 Q       Is the list of wildlife species provided in Exhibit 100, page 8 accurate?  
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16 A       Mr. Kruse on page 8 states that he has seen puffins near the project site. A sighting of a  
17 puffin would be the first record of such a bird in this county, or any of the surrounding  
18 counties according to the Washington ornithological society  
19 [\(<http://www.wos.org/CountyList.htm>\)](http://www.wos.org/CountyList.htm). Puffins are ocean birds and nest along rocky  
20 coastal areas. According to the Washington Breeding Bird Atlas the nearest record for  
21 puffins to the site are at Cape Elizabeth nearly 200 miles to the west on the Pacific coast.  
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24 Q       Mr. Kruse in Exhibit 100, page 13, states that the DEIS and its fixed point surveys of  
25

wildlife do not discuss variations in habitat quality and wildlife density. Does the DEIS

EXHIBIT 28 R (WE-R) - 1  
WALLY ERICKSON  
PREFILED REBUTTAL TESTIMONY

DARREL L. PEEPLES  
ATTORNEY AT LAW  
325 WASHINGTON ST. NE #440  
OLYMPIA, WA 98506  
TEL. (360) 943-9528 FAX (360) 943-1611  
dpeeples@ix.netcom.com

1 and its fixed point surveys for wildlife discuss variations in habitat quality and wildlife  
2 density?

3  
4 A Mr. Kruse is mistaken. The fixed point surveys of wildlife do in fact discuss variation  
5 in wildlife. Stations are found throughout the project area and describe wildlife density  
6 throughout the project site. For example, Figure 11 of Exhibit 7 of the ASC describes  
7 raptor use at the various stations throughout the wind project site. The one station located  
8 very close to the "Pines" area (station D) showed lower raptor use than 4 other stations  
9 within the project site. The station located closest to the area proposed as an alternative  
10 to the project area by Mr. Kruse has one of the highest raptor use estimates observed at  
11 the proposed wind project site. In addition, habitat was mapped for the entire project site  
12 and described in detail. Unique species presence was also documented while field  
13 biologists were traveling between avian use stations.  
14

15  
16 The areas near the springs were also characterized regarding habitat quality. The  
17 observations of botanist Elizabeth Lack suggest these areas have been degraded due to  
18 grazing (see Exhibit 12 of the ASC).  
19

20  
21 Q Mr. Kruse has questioned the validity of establishing adequate baseline information from  
22 one year of baseline wildlife study. Do you believe adequate information was available  
23 for establishing levels of impacts to wildlife?  
24

1 A Yes. The analysis of impacts from wind projects on wildlife and wildlife habitat relies on  
2 more sources of information than simply the number of birds seen on a particular site  
3 during a sample survey. Some of the most important information used to assess impacts  
4 from a new wind project is from studies of realized impacts at existing wind projects, not  
5 just pre-project measures at proposed sites. I believe information on measures of actual  
6 impacts at existing projects is as important as gathering new baseline information on how  
7 many birds or other wildlife use the site.  
8

9  
10 Q Mr. Kruse states in Exhibit 100, page 19, line 4-5, that you did not “cite data extrapolated  
11 from turbines placed in proximity to water sources for wildlife”. Is this true?  
12

13 A No. Many of the wind projects cited in the DEIS and other support information are  
14 located near water sources. The northern portion of the Stateline Wind Project is located  
15 within 1.5 miles of the Columbia River, much closer to the Columbia River than this  
16 project (roughly 7 to 8 miles). The very large Buffalo Ridge Wind Project in  
17 southwestern Minnesota is found adjacent to a very large fresh water lake, and wetlands  
18 are found throughout the wind project area. The Foote Creek Rim Wind Project in  
19 Wyoming has a livestock water tank in close proximity to turbines (<100 m), two riparian  
20 areas with perennial water sources to the east and west of the project area, and two lakes  
21 both less than a mile from turbines. Information from both the Foote Creek Rim and  
22 Buffalo Ridge projects were used in the impact assessment birds, bats and big game at the  
23 Wild Horse Project.  
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1  
2 Q Mr. Kruse states on page 25 of Exhibit 100 that the applicant “only proposes to provide a  
3 meager 600-acre parcel in section 27 as mitigation for those impacts” where those  
4 impacts refer to impacts to wildlife. Does that statement correctly characterize the  
5 mitigation for wildlife impacts from this project?  
6

7  
8 A The proposed mitigation parcel meets the WDFW wind power guidelines for mitigation  
9 of permanent and temporary habitat loss from the project footprint. However, in addition  
10 the Applicant’s mitigation package includes other measures, beyond those required by the  
11 WDFW guidelines, to minimize potential impacts to wildlife and other resources. Rather  
12 than continue to repeat that information in this testimony, I will address a few additional  
13 items. The Applicant has committed to using unguyed permanent meteorological towers  
14 to reduce avian mortality from collisions with wires associated with guyed met towers.  
15 The Applicant, in consultation with WDFW, will develop a livestock grazing  
16 management plan for the privately owned lands within the Project area, as well as  
17 measures for protection and enhancement of the springs within the Project area. This  
18 particular measure could improve the quality of habitat on over 5,000 acres for many  
19 avian species, including sage grouse and other shrub-steppe species, as well as big game.  
20 Livestock grazing management has been identified as an important habitat measure for  
21 preservation and recovery of sage grouse and other shrub-steppe bird species. The fact  
22 that the land will be owned by the Applicant guarantees protection of this habitat from  
23 other types of development for the life of the Project.  
24  
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1 The Applicant has voluntarily agreed to set all turbines at a distance more than 225  
2 meters from the springs, and nearly all turbines are farther than 300 meters from the  
3 springs. From a wetlands impact standpoint, this distance exceeds the most stringent  
4 regulatory setbacks for construction (300 feet) near Class 3 wetlands in Washington state.  
5 These distances are much greater than the potential disturbance and displacement  
6 distances of grassland and shrub-steppe songbird species referenced in the DEIS. The  
7 turbine strings from west to east are typically 1/2 to 1 mile apart, and from north to south,  
8 nearest the Pines area, turbine strings are approximately 1/2 of a mile apart. In addition,  
9 the turbines are not placed at the heads of the riparian draws near the so-called "northern  
10 string", allowing safe flight paths for birds in corridors they likely use most. A  
11 previously proposed turbine string was located on the flat bench just to the west of the  
12 "Pines" and Government Springs area. This string would have been located at the head  
13 of the main Whiskey Dick draw, and perpendicular to a possible movement corridor out  
14 of this area. Its elimination, therefore, may have reduced potential impacts for wildlife.  
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16  
17 Q Mr. Kruse provides a map that shows the location of his proposed alternative project area  
18 and clarified his location. Do you still believe that this alternative site may have fewer  
19 impacts to wildlife compared to the proposed project?  
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21  
22 A First, I want to say that we did not collect field data specific to this "alternative area".  
23 However, I did investigate, analyze and generally compare of some of the potential risk  
24 of impacts, recognizing some species-specific differences that may exist. The area  
25 identified as an alternative area for development by Mr. Kruse is specifically labeled as a

1 priority shrub-steppe block by the WDFW in their PHS database (see Figure 3.5-2,  
2 DEIS). There have been sage grouse observations near the alternative area. The  
3 alternative area is also next to a WDFW designated sage grouse wintering area and may  
4 overlap it slightly. This alternative area is much closer to the Columbia River and  
5 adjacent to Ginko State Park. This alternative area is considered mule and elk winter  
6 range and is at lower elevations than the proposed Project area. The DEIS (3.5.3) stated  
7 that areas farther to the east along and closer to the Columbia River would be more  
8 important to migrating birds, including songbirds, waterfowl, and raptors. Areas closer to  
9 the Columbia River may have greater use by raptors such as wintering bald eagles,  
10 golden eagles, red-tailed hawks, and peregrine falcons.  
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12  
13 Most ornithologists believe that nighttime migrating birds typically move in broad-front  
14 movements at high altitudes except in unique situations such as distinct mountain passes  
15 or other physical features that parallel north to south migration directions. Many have  
16 suggested that the Columbia River, which runs north to south just east of the alternative  
17 area, might have higher migratory use of birds. This again would suggest the alternative  
18 area might present greater risks than the proposed Project area to most of the concerned  
19 wildlife.  
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21  
22 Q If the project is not built, what is the fate of the project lands and surrounding private  
23 land?  
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1 A I do not know the fate of the lands if the project is not built; however, Mr. Kruse seems  
2 to suggest that the private land within the Project should be permanently dedicated to  
3 wildlife habitat. It appears quite speculative to assume WDFW or some other entity will  
4 be able to acquire the private lands associated with the proposed Project for conservation  
5 purposes if the Project is not built.  
6

7  
8 Q Have you read the testimony of Lee Stream, Exhibit 70 and Exhibit 101?  
9

10 A Yes.  
11

12 Q Can you fully describe the position of the Wild Horse Project in relation to the WDFW  
13 management wildlife areas that are referred to in the DEIS and Mr. Stream's testimony.  
14

15 A Yes.  
16

17 Figure 3.9-1 in the DEIS shows the location of the Wild Horse Project in relation to the  
18 Quilomene Wildlife Area and the Whiskey Dick Habitat Management Area. I personally  
19 would not characterize the site as in the "middle of a wildlife refuge/wilderness area" as  
20 Mr. Stream characterized it (Exhibit 70, page 5) based on its proximity west of the  
21 Whiskey Dick Habitat Management Area and primarily south/southwest of the  
22 Quilomene and Colockum Wildlife Areas.  
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1 Q Can you further describe the characteristics of the bat mortality observed at wind  
2 projects?

3  
4 A Yes. Bat mortality has been relatively consistent within regions of the country and  
5 habitats. Mr. Stream, on page 12 in Exhibit 101, states that "Very recent studies have  
6 documented extremely high bat mortality rates at other wind farms". I believe the high  
7 mortality rates he is referring to are from three sites on forested ridgetops in eastern states  
8 (PA, WV, TN). At these sites, forest has been cleared and turbines have been erected in  
9 these clearings. The forest edge is often within 30-45 meters of the turbines. I am not  
10 aware of any wind farm in the west or Midwest that has mortality rates near the  
11 magnitude observed at these three sites. The expected impacts in the DEIS were based  
12 on fatality rates observed at Midwest and western wind projects that have far more  
13 characteristics in common with the proposed project than the forested ridge top sites in  
14 the east. Many of these existing wind project sites in the west and Midwest, where  
15 mortality rates have been relatively low, have water sources and bat habitat near the  
16 project sites (e.g., Buffalo Ridge, Minnesota and Foote Creek Rim, Wyoming). Foote  
17 Creek Rim in Wyoming is within 1 mile of a national forest, and is adjacent to two  
18 extensive riparian areas, both of which contain bat habitat and documented resident bats.  
19 Bat mortality at this site was approximately 1 bat fatality/turbine/yr, and consisted almost  
20 exclusively of widely distributed migratory bats such as hoary bat.  
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23  
24 Q How would you characterize the sage grouse observations within and adjacent to the  
25 project area?



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2 A Occasional observations have been made, however there are no known active leks within  
3 the Colockum Sage Grouse Management Unit. Many of the historic observations of sage  
4 grouse are found along the roads, likely biasing observation locations towards areas more  
5 frequently traveled by humans. The Project area is currently much more accessible by  
6 road than areas to the northeast and east of the project site, and thus reported observations  
7 (from general public and WDFW staff) in the Project area would be expected to be higher  
8 compared to areas that do not have the same level of accessibility. Mr. Stream refers to  
9 one of 25 female sage grouse that were radio collared and translocated to the Yakima  
10 Training Center from Nevada. This particular bird spent time on the Project site before it  
11 died the same year. Another female spent time to the east of the Project area and also  
12 perished the same year.  
13

14  
15 Q Mr. Stream made reference to the State of Washington Audubon designated Important  
16 Bird Area (IBA) called the Quilomene-Colockum Wildlife Area. The project lies within  
17 this area. Can you describe the boundary and size of this designated area.  
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21 A The Quilomene-Colockum Wildlife Area is bounded by the Columbia River, the Kittitas-  
22 Chelan county line, the Vantage Highway, and on the west by Colockum Road. This area  
23 is approximately 165,000 in size.  
24

1 Q How would you characterize the wind project facility, as it relates to potential blockage  
2 of wildlife migration corridors or sage grouse movements?

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4 A First, I am not aware of any narrowly defined migration corridors or movement corridors  
5 within or adjacent to the project site. Secondly, the facilities on the project site only  
6 occupy 165 acres of the site, indicating that much of the project area will be void of  
7 blockage features. Finally, if structures such as trees, roads, and overhead lines block  
8 sage grouse movements to the degree that has been hypothesized in Exhibit 101,  
9 interchange and movements of sage grouse from the populations to the north (Douglas  
10 County) and to the south (Yakima Training Center) would already be extremely limited.  
11 Interstate 90 to the south of the Project, and overhead lines like the BPA Shultz-Hanford  
12 Area Transmission line that runs south of the project area primarily through shrub steppe  
13 and sage grouse breeding and other seasonal habitats would already greatly impede  
14 movements. Under similar assumptions regarding blockage of movements, the Columbia  
15 River to the east of the project site, which separates the Douglas County population from  
16 the Colockum Sage Grouse Management unit would also greatly impede sage grouse  
17 movements and connectivity between these two areas.  
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21 Q Mr. Stream states in Exhibit 101, page 7, line 25, that the Project is in the Pacific Flyway.  
22 Can you further characterize the Pacific Flyway and what you know regarding bird  
23 migration characteristics?  
24  
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1 A Yes. The Pacific flyway is “bounded by the Pacific Ocean to the west and the Rocky  
2 Mountains to the east”. Within this flyway, bird migration for most species is generally  
3 described as a broad-front phenomenon, and in general, migration does not occur within  
4 “narrowly-defined corridors” as Mr. Stream has suggested. However, it has been  
5 hypothesized that some unique topographic features such as mountain passes, large  
6 riparian corridors, and large lakes and rivers may be used more by migrating birds. The  
7 project site does not contain these unique features. The Columbia River, located more  
8 than 7 miles to the east of the Project, likely sees higher use of migrating waterfowl and  
9 water birds, and possibly more migrating songbirds and raptors. In exhibit 101-7, it is  
10 stated, “migratory birds follow the ridge tops as their movement corridors”. While  
11 migratory raptors may use prominent, generally north to south oriented ridges during  
12 migration, there is little support that other birds (e.g., nighttime migratory songbirds) use  
13 ridges as their movement corridors.  
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17 Q Would additional environmental analysis occur if the project ever expanded in the future?  
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19 A Yes. Mr. Stream states on page 5 of Exhibit 70 that “WDFW would be far less  
20 concerned about this Project if they could rely on the assumption that future buildouts in  
21 this area do not occur”. Any future expansion of the Project area would be subject to  
22 additional permitting and SEPA analysis, and would need to include an assessment of the  
23 cumulative impacts of such an expansion. Mr. Stream in Exhibit 101, page 13, line 15-16  
24 states that “...cumulative impacts that should be considered involves further expected  
25

1 development near WHWPP". The cumulative impacts analysis in the SEPA document  
2 considered the other two proposed projects in Kittitas County. If future expansion is  
3 proposed, a cumulative impacts analysis for permitting such expansion will necessarily  
4 be conducted.

5  
6 Q If the project is not built, what is the fate of the project lands and surrounding private  
7 land? . The habitat mitigation exceeds the habitat mitigation recommendations within the  
8 WDFW Guidelines, since it includes mitigation for the permanent and temporary  
9 footprint of the project, as well as habitat enhancement through a livestock grazing  
10 management plan for the entire project area (5000+ acres) and protection and  
11 enhancement of the springs.

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14 A I do not know the fate of the lands if the proposed project is not built. However, the  
15 current status quo does not provide any guarantee of protection for the private lands  
16 within or adjacent to the Project area. Mr. Stream's testimony appears to be based on the  
17 assumption that if the Project does not proceed, the private land within the Project area  
18 will somehow be "protected" from future development.

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21 Q Can you characterize the extent of the shrub-steppe habitat surrounding the project area?

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24 A Yes. Mr. Stream states that the only large remaining block of shrub-steppe in the state of  
25 Washington surrounds the Project. While I agree the Project area is part of a large block

1 of shrub-steppe habitat, some context is necessary. The WDFW Sage Grouse Recovery  
2 Plan shows the current distribution of shrub-steppe cover types for the Sage Grouse  
3 Management areas of Washington. I believe Mr. Stream is referring to the large block of  
4 relatively contiguous habitat that is found in the Hanford (378,000 acres), Yakima  
5 Training Center (339,000 acres), and the Colockum (138,000 acres) sage grouse  
6 management units. The project area (8,600 acres) comprises approximately 1% of this  
7 total area. The size of the Project area is also put into perspective when considering that  
8 the shrub steppe habitats of all the sage grouse management areas put together is nearly  
9 3,000,000 acres (Table 8, page 29, WDFW Sage Grouse Recovery Plan). Mr. Stream  
10 says on page 7 of Exhibit 7 that “the vegetative make-up of the area, with the  
11 predominance of sagebrush, is also conducive for sage grouse because the grouse’s  
12 primary food source is sagebrush. The vegetative makeup of most of the entire  
13 Colockum Sage Grouse Habitat Unit is sagebrush habitat, and would also be conducive to  
14 sage grouse for the very same reason. Historic and current grazing practices may be  
15 having a negative impact on the wildlife habitat quality of the shrub-steppe, spring, and  
16 riparian habitats of the Project area and surrounding lands. The habitat mitigation  
17 exceeds the habitat mitigation recommendations within the WDFW Guidelines, since it  
18 includes mitigation for the permanent and temporary footprint of the project, as well as  
19 habitat enhancement through a livestock grazing management plan for the entire project  
20 area (5000+ acres) and protection and enhancement of the springs  
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24 Q Can you further characterize the information available regarding the impacts to sage  
25 grouse from wind turbines in general and from this project?

1  
2 A Yes. The hypothesis that wind turbines will displace sage grouse has not been tested or  
3 proven. I am not aware of studies that indicate tall structures, which do not provide perch  
4 platforms for raptors, have a significant and large negative effect on sage grouse use. In  
5 addition, there is no empirical data from operating wind farms to statistically test the  
6 hypothesis that sage grouse avoid wind turbines; however, there is some information that  
7 suggests sage grouse will use areas near turbines. The presence of young broods near  
8 turbines at the Foote Creek Rim Wind Project in Wyoming suggests that nesting has  
9 likely occurred somewhere near that wind project, and that wind turbines do not displace  
10 at least some females from brood rearing, and possibly nesting, near wind turbines.. Mr.  
11 Stream references F. Hall in California regarding his studies of impacts of a  
12 communication line on historic grouse leks. According to my previous communications  
13 with Mr. Hall, this study has not been released publicly, and has apparently been in  
14 development and review for several years. I have asked Mr. Hall for more details to  
15 understand how the study was conducted, and for any reports he has available to  
16 determine whether the inferences made from this study are supported by the study design.  
17 This study may be helpful in understanding the potential impacts of a  
18 telecommunications line on presence of leks, but I do not know if factors other than the  
19 presence of the communication lines have been considered to determine the impacts. I  
20 suspect that factors such as habitat alterations due to roads, housing, and other human  
21 development may be important factors to consider when evaluating the effects of the  
22 referenced communication line.  
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1 I believe that it is extremely speculative to say that the development of this project will  
2 have a “devastating impact on the preservation and recovery of sage grouse in  
3 Washington” as is stated in Exhibit 101, page 10. There is some uncertainty regarding  
4 the local impacts of wind turbines on sage grouse. However, there has been documented  
5 sage grouse use near wind turbines in Wyoming, there are currently no known active leks  
6 within the proposed project area, and there are no known occupied lek complexes  
7 anywhere within the Colockum Sage Grouse Management Area. While the entire  
8 Colockum management area (128,000 acres) has been identified as important for  
9 connectivity between the two existing populations, improving on the suitability of habitat  
10 and expanding the currently occupied range of sage grouse throughout shrub-steppe and  
11 CRP habitats within the 14 sage grouse management units (3,000,000 acres) is one of  
12 many extremely important and complex factors related to sage grouse recovery.  
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15 Q How would you characterize the wind project site after the project is developed?  
16

17 A There is some uncertainty regarding the precise measure of impacts from the proposed  
18 Project as there always is with any development. However, the site as a whole should  
19 retain its wildlife habitat value. Only 165 acres of shrub-steppe habitat will be  
20 permanently impacted out of a total Project area of over 8,000 acres. The site may  
21 actually get less human and vehicle traffic during operations than it currently does due to  
22 the Applicant’s implementation of a controlled access plan. Large areas of undisturbed  
23 habitat will continue to exist between turbine strings, and many of these large undisturbed  
24 areas include the springs, sagebrush habitat and riparian areas. Unlike intensive  
25

1 industrial developments, there will be no large parking areas, paved roads, fenced storage  
2 yards, or heavy vehicle traffic common to industrial sites. Large areas of undisturbed  
3 habitat will continue to exist between turbine strings, and these large undisturbed areas  
4 include the springs, sagebrush habitat, and riparian areas. It is anticipated that the  
5 suitability of habitat for sensitive avian species will improve on most of the project site  
6 due to implementation of the grazing and rangeland management plan proposed by the  
7 Applicant. Disturbance and additional habitat alterations from humans may decrease  
8 through controlled access to the site, but recreation activities will continue. Wildlife will  
9 continue to use the project area.  
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